

REMARKS

Claims 1-8 are currently pending, wherein claim 1 is independent. Favorable reconsideration is respectfully requested in view of the remarks presented herein below.

At the outset, Applicants note with appreciation the indication that claims 7 and 8 contain allowable subject matter and would be allowed if rewritten in independent form.

On page 2 of the final Office action ("Action"), the Examiner rejects claims 1 and 3-5 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Publication No. 2003-240852 to Shunpei ("Shunpei") in view of U.S. Patent No. 7,023,531 to Gogolia et al. ("Gogolia"). Applicants respectfully traverse this rejection.

In order to support a rejection under 35 U.S.C. §103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness three criteria must be met. First, there must be some motivation to combine the cited references. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claims 1 and 3-5 are patentable over the combination of Shunpei and Gogolia for at least the reason that the combination fails to teach each and every claimed element. More specifically, the combination fails to teach or suggest a frequency deviation detecting means that detects the frequency deviation of the light signal due to propagation by the optical guide as claimed.

In rejecting claim 1, the Examiner acknowledges that Shunpei fails to disclose a frequency deviation detecting means that detects the frequency deviation of the light signal due to propagation by the optical guide. Therefore, the Examiner asserts that Gogolia discloses a LADAR system that detects deviation caused by the propagation system. To support this assertion, the Examiner points to column 4, line 58 to column 5, line 35 and Fig. 1 of Gogolia. The Examiner's assertion regarding Gogolia is unfounded.

Although Gogolia discloses the laser measuring device includes a microcontroller connected to a control photodetector arranged in the measurement light beam for determining an interference modulation component, one skilled in the art would readily appreciate that the interference modulation component detected in Gogolia is not due to propagation of the light signal by the *optical guide* as claimed. To the contrary, the interface detected by Gogolia is due

to the various modulation circuitry in Gogolia, not propagation within an optical guide as claimed.

Since Shunpei and Gogolia both fail to disclose or suggest a light wave radar apparatus that includes a frequency deviation detecting means that detects the frequency deviation of the light signal due to propagation by the optical guide as claimed, the combination of these two references cannot possibly disclose or suggest said element. Therefore, even if one skilled in the art were motivated to combine Shunpei and Gogolia, the combination would still fail to render claims 1 and 3-5 unpatentable because the combination fails to disclose each and every claimed element. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1 and 3-5 under 35 U.S.C. § 103.

On page 4 of the Action, the Examiner rejects claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Shunpei in view of Gogolia, further in view of Japanese Patent Publication No. 63-266382 to Osamu (Osamu '82) or Japanese Patent Publication No. 63-71675 to Osamu (Osamu '75). Applicants respectfully traverse this rejection.

As discussed above with respect to claim 1, from which claim 2 depends, the combination of Shunpei and Gogolia fails to disclose or suggest a frequency deviation detecting means that detects the frequency deviation of the light signal due to propagation by the optical guide as claimed. Therefore, claim 2 is patentable over the combination of Shunpei and Gogolia for at least those reasons presented above with respect to claim 1.

Osamu '82 and Osamu '75 disclose a laser distance measuring instrument. However, neither of these two references overcome the deficiencies of Shunpei and Gogolia. Since Shunpei, Gogolia, Osamu '82, and Osamu '75 each fail to disclose or suggest a light wave radar apparatus that includes a frequency deviation detecting means that detects the frequency deviation of the light signal due to propagation by the optical guide as claimed, any combination of these four references cannot possibly disclose or suggest said element. Therefore, even if one skilled in the art were motivated to combine Shunpei, Gogolia, Osamu '82, and/or Osamu '75, the combination would still fail to render claim 2 unpatentable because the combination fails to disclose each and every claimed element. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 2 under 35 U.S.C. § 103.

Further on page 4 of the Action, the Examiner rejects claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Shunpei in view of Gogolia, further in view of Japanese Patent Publication No. 4-133533 to Makato (“Makato”). Applicants respectfully traverse this rejection.

Claim 6 depends from claim 1. Therefore, claim 6 is patentable over the combination of Shunpei and Gogolia for at least those reasons presented above with respect to claim 1. Makato discloses an output stabilized light source. However, Makato fails to overcome the deficiencies of Makato and Gogolia.

Since Shunpei, Gogolia, and Makato each fail to disclose or suggest a light wave radar apparatus that includes a frequency deviation detecting means that detects the frequency deviation of the light signal due to propagation by the optical guide as claimed, the combination of these three references cannot possibly disclose or suggest said element. Therefore, even if one skilled in the art were motivated to combine Shunpei, Gogolia, and Makato, the combination would still fail to render claim 6 unpatentable because the combination fails to disclose each and every claimed element. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 6 under 35 U.S.C. § 103.

The application is in condition of allowance. Notice of same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Penny Caudle Reg. No. 46,607 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/575,379
Amendment dated March 4, 2009
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Docket No.: 1163-0562PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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